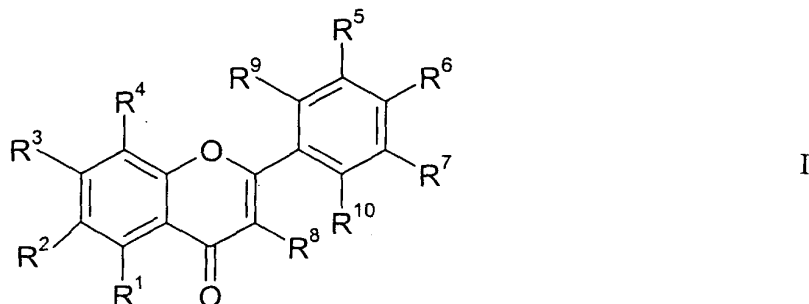


## CLAIMS

1. A composition having antioxidant properties comprising at least one compound of the formula I



where  $R^1$  to  $R^{10}$  may be identical or different and are selected from

- H
- $OR^{11}$
- straight-chain or branched  $C_1$ - to  $C_{20}$ -alkyl groups,
- straight-chain or branched  $C_3$ - to  $C_{20}$ -alkenyl groups,
- straight-chain or branched  $C_1$ - to  $C_{20}$ -hydroxyalkyl groups, where the hydroxyl group(s) are bonded to a primary or secondary carbon atom of the chain and furthermore the alkyl chain is optionally interrupted by oxygen, and/or
- $C_3$ - to  $C_{10}$ -cycloalkyl groups and/or  $C_3$ - to  $C_{12}$ -cycloalkenyl groups, where the rings are each optionally bridged by  $-(CH_2)_n$ - groups, where  $n = 1$  to  $3$ ,
- where all  $OR^{11}$  are, independently of one another,
  - OH
  - straight-chain or branched  $C_1$ - to  $C_{20}$ -alkoxy groups,
  - straight-chain or branched  $C_3$ - to  $C_{20}$ -alkenyloxy groups,

- straight-chain or branched C<sub>1</sub>- to C<sub>20</sub>-hydroxyalkoxy groups, where the hydroxyl group(s) are bonded to a primary or secondary carbon atom of the chain and furthermore the alkyl chain is optionally interrupted by oxygen, and/or
- C<sub>3</sub>- to C<sub>10</sub>-cycloalkoxy groups and/or C<sub>3</sub>- to C<sub>12</sub>-cycloalkenyloxy groups, where the rings are each optionally bridged by -(CH<sub>2</sub>)<sub>n</sub>- groups, where n = 1 to 3, and/or
- mono- and/or oligoglycosyl radicals,

with the proviso that:

- at least 3 radicals from R<sup>1</sup> to R<sup>7</sup> are OH and that at least 2 pairs of adjacent -OH groups are present in the molecule, or R<sup>2</sup>, R<sup>5</sup> and R<sup>6</sup> are OH and the radicals R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>7-10</sup> are H.
2. The composition of claim 1, comprising at least one compound of the formula I wherein at least two adjacent radicals of the radicals R<sup>1</sup> to R<sup>4</sup> are OH and at least two adjacent radicals of the radicals R<sup>5</sup> to R<sup>7</sup> are OH.
3. The composition of claim 1, comprising at least one compound of the formula I wherein at least three adjacent radicals of the radicals R<sup>1</sup> to R<sup>4</sup> are OH.
4. The composition of claim 1, comprising at least one compound of the formula I wherein the radicals R<sup>1</sup> to R<sup>3</sup> are OH.

5. The composition of claim 1, comprising one or more compounds of the formula I in an amount of from 0.01 to 20% by weight.
6. The composition of claim 1, comprising one or more compounds of the formula I in an amount of from 0.1 to 10% by weight.
7. A composition of claim 1, for the protection of body cells against oxidative stress, which further comprises one or more other antioxidants and/or vitamins.
8. The composition of claim 7, wherein at least one other anti-oxidant or vitamin is vitamin A palmitate, vitamin C or a derivative thereof, DL- $\alpha$ -tocopherol, tocopherol E acetate, nicotinic acid, pantothenic acid or biotin.
9. A composition of claim 1, which further comprises one or more UV filters.
10. The composition of claim 9, wherein at least one UV filter is selected from the group consisting of 3-(4'-methylbenzylidene)-dl-camphor, 1-(4-tert-butylphenyl)-3-(4-methoxyphenyl)propane-1,3-dione, 4-isopropylidibenzoylmethane, 2-hydroxy-4-methoxybenzophenone, octyl methoxycinnamate, 3,3,5-trimethylcyclohexyl salicylate, 2-ethylhexyl 4-(dimethylamino)benzoate, 2-ethylhexyl 2-cyano-3,3-diphenylacrylate, 2-phenylbenzimidazole-5-sulfonic acid and its potassium, sodium and triethanolamine salts.

11. The composition of claim 1, which composition is a food or a food supplement and comprises an excipient which is suitable for a food or a food supplement.
12. A process for preparing a composition of claim 1, which comprises mixing a compound of the formula I with an excipient which is suitable cosmetically or dermatologically or for food.
13. A process according to claim 12, wherein the compound of the formula I is prepared by reacting a 2-hydroxyacetophenone compound with a lithium compound and subsequently a keto compound.
14. A method for achieving an anti-oxidant effect on a patient which comprises administering to the patient a composition of claim 1.
15. The method of claim 14, wherein the composition is applied to the skin.
16. The method of claim 14, wherein the composition further comprises at least one UV filter compound.
17. The method of claim 16, wherein at least one UV filter compound is a dibenzoylmethane compound.
18. A composition of claim 1, which is in the form of an emulsion.